

WHAT IS CLAIMED IS

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1. An ink-jet recording device comprising:
a multi-nozzle recording head having heating
elements in a density in a range between 400 and 2400
dpi arranged on a substrate, wherein ink is fired
10 through a nozzle by a function of growth of air bubble
generated in a recording liquid in each heating element,
wherein said multi-nozzle recording head has a
long dimension so as to cover a printing range of a
recording medium which is conveyed by a conveyance belt
15 to a position at which the nozzle surface of said
recording head face said recording medium.

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2. The ink-jet recording device as claimed in
claim 1, wherein:
the recording medium used there comprises a
coating paper having a material coated on a base
25 material such that the ink adhering thereto is easy to

be absorbed thereinto.

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3. The ink-jet recording device as claimed in claim 1, further comprising a recording medium heating unit for heating the recording medium, extending along a direction along which the nozzles of said recording head
10 are arranged,

wherein the heating range of said heating unit covers a range wider than the printing range of the recording medium.

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4. The ink-jet recording device as claimed in claim 3, wherein said heating unit has a function of
20 heating the printing surface of the recording medium not in contact with the recording medium.

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5. The ink-jet recording device as claimed in claim 4, further comprising a rear heating unit provided on the rear side of the recording medium, having a heating range extending along the direction along which the nozzles of said recording head are arranged wider than the printing range of the recording medium.

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6. The ink-jet recording device as claimed in claim 5, wherein said rear heating unit has a function of heating the recording medium in contact with the recording medium

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7. The ink-jet recording medium as claimed in claim 4, wherein said heating unit has a light source and an optical system condensing the light emitted by said light source.

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8. The ink-jet recording device as claimed in claim 3, wherein said heating unit comprises a roller heating the printing surface of said recording medium in contact therewith, and having an ink-repellent material
5 provided on the surface thereof.

10 9. An ink-jet copier comprising:
a scanner part reading an image of an original; and
a recording part performing a recording operation by firing ink onto a printing surface of a
15 recording medium based on image data supplied from said scanner part,
wherein said recording part comprises a plurality of recording heads for respective color components each having heating elements in a density in
20 a range between 400 and 2400 dpi arranged on a substrate, wherein ink is fired out through a nozzle by a function of growth of air bubble generated in a recording liquid in each heating element which is driven according to the image data,
25 wherein said each recording head has a long

dimension so as to cover a printing range of the recording medium which is conveyed by a conveyance belt to a position at which the nozzle surfaces of each recording head face the recording medium.

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10. The ink-jet copier as claimed in claim 9,
10 wherein:

the recording medium used there comprises a coating paper having a material coated on a base material such that the ink adhering thereto is easy to be absorbed thereinto.

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11. The ink-jet copier as claimed in claim 9,
20 further comprising a recording medium heating unit for heating the recording medium, extending along a direction along which the nozzles of said recording head are arranged,

wherein the heating range of said heating unit
25 covers a range wider than the printing range of the

recording medium.